

## CLAIMS:

1. A liquid crystal display device (1) for avoiding disclinations comprising a first and a second substrate (2 and 3), said first and second substrates (2 and 3) being located facing one another with a liquid crystal material layer (6) thereinbetween, a first and a second electrode (4 and 5) arranged at said first and second substrates (2 and 3) respectively, said  
5 first and second electrodes (4 and 5) being formed on the liquid crystal side of the said first and second substrates (2 and 3), whereby the liquid crystal material layer (6) exhibits zero-pretilt and at least one of the electrodes (4 and 5) at its end parts (7, 9; 8, 10) is connected to at least a first and a second mutually different and adjustable voltage and is adapted to exhibit an essential resistance between the end parts (7, 9; 8, 10).
- 10 2. A liquid crystal display device (1) according to claim 1, wherein at least one of the electrodes (4 and 5) is adapted to exhibit such a resistance between the end parts (7 and 9; 8 and 10) that a voltage difference is maintainable during the operation of said liquid crystal display device (1).
- 15 3. A liquid crystal display device (1) according to any of the claims above, wherein the electrodes (4 and 5) are arranged to at use generate an electromagnetic field (E) that is obliquely angled relatively to the normals of said electrodes (4 and 5).
- 20 4. A liquid crystal display device (1) according to any of the claims above, wherein at least one of the electrodes (4 and 5) is made of a resistive material such that a voltage difference between the end parts (7 and 9; 8 and 10) of said electrode is maintainable during the operation of said liquid crystal display device (1).
- 25 5. A liquid crystal display device (1) according to any of the claims above, wherein both electrodes (4 and 5) are adapted to exhibit such a resistance between the end parts (7 and 9; 8 and 10) of said electrode such that a voltage difference is maintainable during the operation of said liquid crystal display device (1).

6. A liquid crystal display device (1) according to any of the claims 1-4, wherein only one of the electrodes (4 and 5) is adapted to exhibit such a resistance between the end parts (7 and 9; 8 and 10) of said electrode such that a voltage difference is maintainable during the operation of said liquid crystal display device (1).

5

7. A liquid crystal display device (1) according to any of the claims 1-5, wherein at least one of the electrodes (4 and 5) exhibits a potential drop between connected voltages at the end parts (7, 9; 8, 10).

10

8. A liquid crystal display device (1) according to any of the claims above, wherein at least one of the electrodes (4 and 5) comprises a set of electrode segments (12) which each is separately connected to a resistor (13).

15

9. A liquid crystal display device (1) according to any of the claims above, wherein the liquid crystal display device (1) has been aligned by non-contact alignment techniques.

20

10. A liquid crystal display device (1) according to claim 4, wherein the resistive material is ITO.

11. A liquid crystal display device (1) according to claim 4, wherein the resistive material is oxygen enriched ITO.

25

12. A liquid crystal display device (1) according to claim 4, wherein the resistive material is SiCrN.

13. A liquid crystal display device (1) according to claim 4, wherein the resistive material is TaN.

30

14. A liquid crystal display device (1) according to claim 4, wherein the resistive material is SnO<sub>2</sub>.

15. A method for driving a liquid crystal display device (1), comprising the step of changing the direction of the applied electric field (E) during switching of the liquid crystal molecules.

5 16. A method for driving a liquid crystal display device (1) according to claim 15, comprising the steps of

- providing at least two electrodes (4 and 5) wherein at least one of said electrodes (4 and 5) exhibits a resistance between its end parts (7 and 9; 8 and 10),
- connecting at least a first and a second mutually different and adjustable  
10 voltage to at least one of said electrodes (4 and 5),
- applying subsequently first an oblique electromagnetic field (E) between said electrodes (4 and 5), and then at a later moment in time,
- applying an orthogonal electromagnetic field (E) between said electrodes (4 and 5).

15

17. A method for driving a liquid crystal display device (1) according to claim 15, wherein the characteristics of the electromagnetic field (E) is controlled by the voltages connected to said end parts (7, 9; 8, 10) of the electrodes (4 and 5).